DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

V

SYSTEM
OR SERIES

V196 (B7)
SHELL 11 CROW
SE SE SEC. 26, T. 9 S., R. 37 E.
BIG HORN COUNTY, MONTANA
KB 4414'

V197 (D 25)
SHELL 1 DETAMPLE
SE NW SEC. 22, T.55 N., R. 85 W.,
SHERIDAN COUNTY, WYOMING
KB 4122'

V198 (F45)
AUSTRAL 1 BUELL
SE NW SEC. 9, T.52 N., R. 82 W.,
JOHNSON COUNTY, WYOMING
KB 4688'

V199
CHEVRON N. WYO. LAND CO. 1
NE SW SEC 24, T 50 N., R. 82 W.
JOHNSON COUNTY, WYOMING
GR 4856'

V200 (I72)
EMBAR 1 GOVT.
NE SE SEC. 26, T. 45 N., R. 82 W.,
JOHNSON COUNTY, WYOMING
KB 5252'

V201 (J87)
SHELL 13X-11B MONTGOMERY
NW SW SEC. 11, T. 44 N., R. 79 W.,
JOHNSON COUNTY, WYOMING
KB 4536'

V202
SHELL GOVT. 41X-34
NE NE SEC. 34, T. 43 N., R. 78 W.
JOHNSON COUNTY, WYOMING
KB 4819'

V203 (M116)
SINCLAIR 1 WIND CREEK
SE SW SEC. 17, T. 40 N., R. 76 W.
CONVERSE COUNTY, WYOMING
KB 5532'

LANCE FORMATION AND FOX HILLS SANDSTONE, UNDIVIDED
LEWIS SHALE
* TEAPOT SANDSTONE MEMBER
MESAVERDE FORMATION
PARKMAN SANDSTONE MEMBER
BASE OF ARDMORE BENTONITE BED
SHANNON SANDSTONE MEMBER
STEELE SHALE
FAULT?
NIOBRARA FORMATION
SAGE BREAKS SHALE
FRONTIER FORMATION
MOWRY SHALE
MUDDY SANDSTONE
SKULL CREEK SHALE
*'DAKOTA SILT'
* TECKLA SANDSTONE MEMBER
SUSSEX SANDSTONE MEMBER
LEWIS SHALE
LANCE FORMATION AND FOX HILLS SANDSTONE, UNDIVIDED
* TECKLA SANDSTONE MEMBER
WALL CREEK MEMBER
BELLE FOURCHE MEMBER
BASE OF CLAY SPUR BENTONITE BED
INYAN KARA GROUP
MORRISON FORMATION

UPPER CRETACEOUS
LOWER CRETACEOUS

F
1

V200 (T72)
1 EMBAR 1 GOVT.
NE SE SEC. 26, T. 45 N., R. 82 W.,
W. JOHNSON COUNTY, WYOMING
NG KB 5252'

V201 (J87)
SHELL 13X-11B MONTGOMERY
NW SW SEC. 11, T. 44 N., R. 79 W.,
JOHNSON COUNTY, WYOMING
KB 4536'

V202
SHELL GOVT. 41X-34
NE NE SEC. 34, T. 43 N., R. 78 W.
JOHNSON COUNTY, WYOMING
KB 4819'

V203 (M116)
SINCLAIR 1 WIND CREEK
SE SW SEC. 17, T. 40 N., R. 76 W.,
CONVERSE COUNTY, WYOMING
KB 5532'

V204 (O130)
SUPERIOR 1 GOVT. TRACEY
SE NW SEC. 26, T. 38 N., R. 75 W.,
CONVERSE COUNTY, WYOMING
KB 5532'

V205 (S168)
HUMBLE 1 HORNBECK
SW SW SEC. 16, T. 36 N., R. 74 W.,
CONVERSE COUNTY, WYOMING
KB 5793'

V206 (S169)
HUMBLE 1 CAREY
NE NW SEC. 3, T. 33 N., R. 74 W.,
CONVERSE COUNTY, WYOMING
KB 5036'

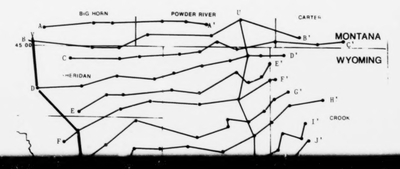
V'

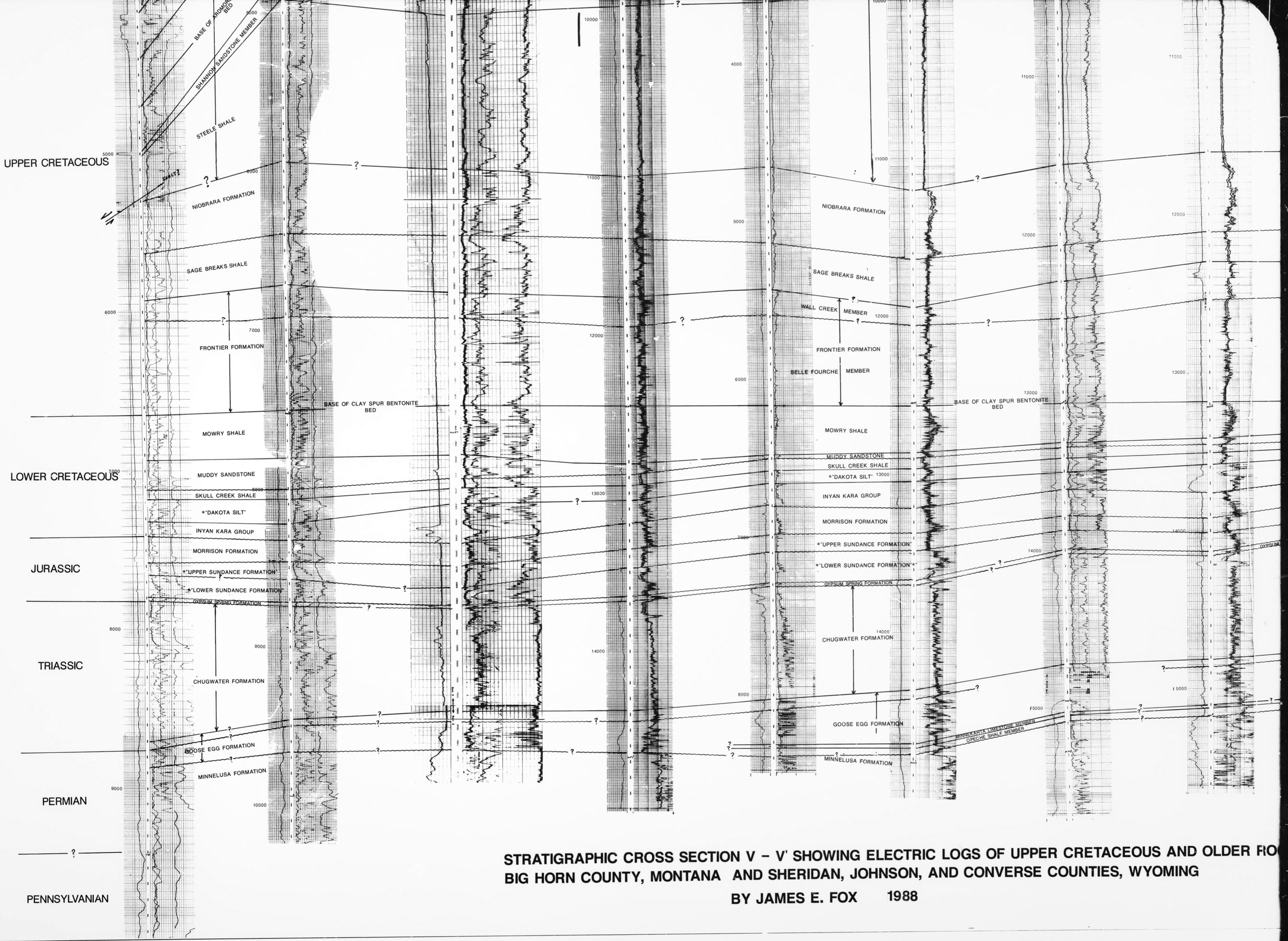
OPEN FILE 86-465V

U.S. Geological Survey
OPEN FILE REPORT
This illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.

LANCE FORMATION AND FOX HILLS SANDSTONE, UNDIVIDED
* TECKLA SANDSTONE MEMBER
LEWIS SHALE
MESAVERDE FORMATION
* TEAPOT SANDSTONE MEMBER
PARKMAN SANDSTONE MEMBER
SUSSEX SANDSTONE MEMBER
BASE OF ARDMORE BENTONITE BED
FAULT
STEELE SHALE
SHANNON SANDSTONE MEMBER
NIOBRARA FORMATION
SAGE BREAKS SHALE
WALL CREEK MEMBER
FRONTIER FORMATION
BELLE FOURCHE MEMBER
BASE OF CLAY SPUR BENTONITE BED
MOWRY SHALE
MUDDY SANDSTONE
SKULL CREEK SHALE
*"DAKOTA SILT"
INYAN KARA GROUP
MORRISON FORMATION
*UPPER SUNDANCE FORMATION
UNNAMED MEMBER

F 2





STRATIGRAPHIC CROSS SECTION V – V' SHOWING ELECTRIC LOGS OF UPPER CRETACEOUS AND OLDER RO
BIG HORN COUNTY, MONTANA AND SHERIDAN, JOHNSON, AND CONVERSE COUNTIES, WYOMING

BY JAMES E. FOX 1988

SHANNON SANDSTONE MEMBER

NIOBRARA FORMATION

SAGE BREAKS SHALE

WALL CREEK MEMBER

UNNAMED MEMBER

FRONTIER FORMATION

BELLE FOURCHE MEMBER

BASE OF CLAY SPUR BENTONITE BED

MOWRY SHALE

MUDDY SANDSTONE

SKULL CREEK SHALE

*"DAKOTA SILT"

INYAN KARA GROUP

MORRISON FORMATION

*"UPPER SUNDANCE FORMATION"

*"LOWER SUNDANCE FORMATION"

GYPSUM SPRING FORMATION

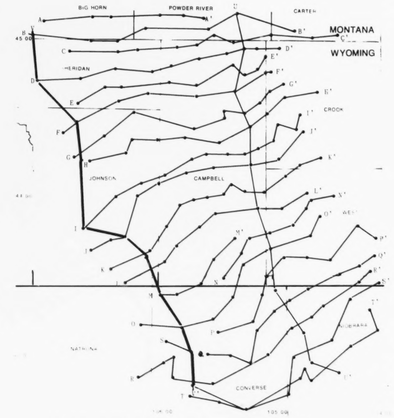
CHUGWATER FORMATION

GOOSE EGG FORMATION

MINNEKAHTA LIMESTONE MEMBER

OPECHE SHALE MEMBER

MINNELUSA FORMATION



Map showing locations of selected wells drilled for oil and gas in the Powder River basin.

EXPLANATION

Correlation line at Group, Formation, Member, or bentonite boundaries --- Queried where correlation is uncertain.

Correlation along an unconformity --- Queried where correlation is uncertain.

* Widely used subsurface terminology.

Datum is top of Lower Cretaceous Mowry Shale.

Vertical scale 1 inch = 200 feet

Spontaneous potential curve

Resistivity curves

3000'

Depth of well, in feet, below Kelly Bushing (KB)

This cross section was prepared in part for the Evolution of Sedimentary Basins Program

This north-south cross section was prepared after the release of the earlier east-west cross sections in this group, OF 86-465A through OF 86-465T. Some changes in interpretation are introduced here, particularly in the western portions of the earlier releases. Therefore, in some cases the tops of formations will not agree.

SS SECTION V – V' SHOWING ELECTRIC LOGS OF UPPER CRETACEOUS AND OLDER ROCKS, POWDER RIVER BASIN, ONTANA AND SHERIDAN, JOHNSON, AND CONVERSE COUNTIES, WYOMING

BY JAMES E. FOX 1988

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